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Does it Pay to Invest in Computer Based Testing Technology? Realities to Implement an Internet Based University Entrance Examination (iB PAU)

Abstract

The University entrance examination (PAU) is the most important high-stakes exam in the General educational system in Spain. It has 6 sections of which the Foreign Language one is very relevant to the final score. The English section has had almost not significant changes in the last 20 years despite all the research in language learning and language testing in that time. Recent Spanish research projects suggest that there is a possibility to computerize the English (and the rest) sections of the University Entrance National Examination. Computer assisted language testing (CALT) seems an interesting possibility to improve its format, face validity and make it more reliable for all the different stake holders (students, teachers, institutions and so). Because of technical and administrative issues, students need to move to the universities (and, in not few cases, that mean very long distances) to take the exam. Thus, the key matter is whether it is possible to implement CALT in schools instead of universities to make it more accessible and less stressing for most students, and also to include a new test format to strengthen the exam validity. In order to study the deficiencies, a survey was completed by 100 teachers and then some of them participated in three focus groups. The study concluded that it is possible to implement CALT in high schools but requires an institutional and personal effort for both teachers and students. The survey also pointed that the computer version could include tasks that, at the moment, are not done due to the high price of their inclusion (such as an oral section).

Short Paper

Introduction

Today, most high school leavers need to sit the University Entrance Examination (PAU) [the most important high-stakes test in secondary education in Spain] at universities instead of their own schools. It seems self evident that when students take the test, they would feel more at ease in the school where they attend their classes rather than in a cold college where they have never been before. According to Weir (2005), setting is one of the most significant factors in language testing (Wall & Horak, 2007). A familiar setting reduces anxiety (Phillips, 1988). Additionally, a local setting facilitates the delivery of the test because it allows students to remain in their schools instead of moving to the larger city colleges where discomfort due to the unknown setting is usually clear. However, the researchers of the sponsored Spanish Ministry research project (HUM2007-66479-C02-01) to computerize the PAU believe that the current state of technology in Spanish schools is not yet sufficient to allow for delivery of the test online in the schools themselves. This opinion is based on the fact that although the Ministry made a huge effort to update many schools technologically in the early 2000's, usually public schools lack the resources for the necessary maintenance. Besides, school boards consider that computers, scanners, digital cameras, and other technology in schools in an atmosphere of violence (as it is recognized today in many regional educational boards) and lack of respect (Traver Martí, 2006) deserve limited funds which may be necessary for different purposes. This paper reviews current research on technology for its use for high stakes language testing in local school and intends to show the conditions under which computers could be used for the PAU positively.

Technology in the foreign language testing

Spanish schools do not have a tradition for testing through computers. In fact, although schools usually have computer programs for language learning, language teachers have neither the desirable number nor a possibility to implement CALL as they may desire since computer laboratories are usually limited to computer classes. Additionally, it should be considered that this lack of possibilities has limited the language teachers' skills as computer users in educational settings, and, as a consequence, they feel their limitations. Thus, when teachers use computers for language learning, they tend to use it as a "driller". That means they just limit themselves to control the class while the computer software (or Internet) delivers exercises. Lately, teachers have begun to use computers to gather information (especially cultural information) but the students have limited opportunities for communicative interactions (except for some keypal projects or occasional synchronous or asynchronous communication activities), which is one of the major features in online language testing.

Testing with computers

CALT differs from CALL in various aspects. Some of them relate to technology (García Laborda, 2007a; Chapelle & Douglas, 2006; Chapelle, Jamieson & Hegelheimer, 2003) or interface design (García Laborda, 2007b; Fulcher, 2004) and some have been addressed by studies by Roever (2001). There have also been claims that students who use e-learning methodologies score better than their counterparts without them (Butzin, 2000; Mann, Shakeshaft, Becker & Kottkamp, 1999). TSE has done a large number of studies suggesting the benefits of computer and Internet based testing. However, very few studies have addressed the situation in national compulsory tests. There are two main differences between TOEFL and national examinations: a) the proficiency level; and b) motivation. In general, TOEFL examinees who have to go through important changes in the way they work: they have to adapt to new interfaces, new keyboards and they are generally familiarized with the necessary computer skills to approach the test. However, students in national compulsory examinations are the core students and their motivation may be limited to just passing the test. Additionally, they have not usually taken specific classes to face the test other than those attended in the school. Thus their opportunities are much more limited to achieve a good grade than those who have extensive training (as in TOEFL). Since much of the current research has been done with highly motivated students or teachers with certain interests in showing the benefits of CALT, it is difficult to know if the so far claimed benefits would actually affect to all the students in a compulsory test (which, in the end, is the most common case). Thus, "rigor is important for all studies...to avoid weaknesses that have plagued much of the literature to date" (Egbert, 2005: 19).

Learning about CALT from the teachers' experience

In order to research the relationship between CALT and teachers' expectations, 100 Valencian teachers answered a questionnaire which was followed by focus groups organized by Macmillan-Heinemann Iberica. According to the questionnaire, teachers believe that their schools do not meet what they consider necessary in technology, time and space to prepare their students for the IB PAU as most schools are right now. According to the focus group meetings, the following changes could be necessary:

- a) Improving and updating the schools' hardware especially in classes other than the computer labs. Teachers believe that foreign classroom with computers should also have the traditional class setting,
- b) Access should be improved in certain areas. Although most schools have computers in their libraries, they cannot be accessed at the students' convenience (discipline in many Spanish schools makes it impossible),
- c) Preparing teachers and students for the change. For many teachers, their training would be an essential part of the change but they have limited time and teacher training and education does not bring along an increase in their salary. For many teachers, their students' ability with computers is limited to information gathering and

computer playing but teachers are reluctant to believe that students may be able to cope with the new situation in a test,

- d) Finding , most favorable, where computers can be strictly used for academics and the software really leads to learning and not to just "students' amusement", and
- e) Time and hope, teachers need to have the time to adapt themselves to the new situation and a strong will to believe that the change is possible.

Conclusion

The small research addressed in this paper is still far from being a reference point about the possibilities of CALT implementation in Valencia (Spain). However, it shows that technology is possible but requires dramatic changes in schools since students and teachers will have to change. Computers can improve the quality of language (and other subjects) assessment and learning but institutional and personal efforts are necessary. Thus, is the change worthwhile? Who is going to take the first step?

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Keywords

Testing, attitudes, classroom practice, qualitative, innovation

Bio Data

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